

10/528358

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JC05 Rec'd PCT/PTO 18 MAR 2005

In re the Application of

Christophe KOPP et al.

Attn: PCT Branch

Application No. New U.S. National Stage of PCT/FR03/02880

Filed: March 18, 2005

Docket No.: 123236

For: OPTICAL DEVICE PRODUCING TWO BEAMS CAPABLE OF REACHING A
COMMON SENSOR

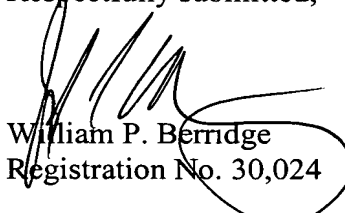
**SUBMISSION OF THE ANNEXES TO THE
INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached hereto is a submission of the annexes to the International Preliminary Examination Report (Form PCT/IPEA/409). The attached translated material replaces all claims.

Respectfully submitted,


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Claims

- 5 1. Optical device comprising reflecting means arranged on the optical path of an incident beam (10) emitted by a first optical source (7) so as to form a reflected light beam (12), and a second optical source (8) producing a second light beam (11) of different wavelength so that the reflected beam (12) and the second light beam (11) pass through a zone of the space (14) wherein an object to be analyzed is to be exposed, and reach a common sensor (13),
- 10 optical device (6) characterized in that the reflecting means are arranged proximate and outside to the optical path of the second beam (11) and in that the optical device (6) comprises a collimating lens (19) common to the first and second sources (7, 8) and arranged at the intersection of the first incident beam (10) and of the second beam (11).
- 15 2. Optical device according to claim 1, characterized in that the optical device (6) comprises means for deforming the reflecting means.
- 20 3. Optical device according to one of the claims 1 and 2, characterized in that the optical device (6) comprises means for orienting the reflecting means.
4. Optical device according to one of the claims 1 to 3, characterized in that the reflecting means are formed by a mirror (15).
- 25 5. Optical device according to claim 4, characterized in that an element (17) absorbing a part of a light radiation is arranged on the reflecting surface of the mirror (15).

6. Optical device according to one of the claims 1 to 3, characterized in that the reflecting means are formed by a semi-reflecting plate (16).

5 7. Optical device according to claim 6, characterized in that the semi-reflecting plate (16) is arranged on an element (17) absorbing a part of a light radiation.

8. Optical device according to any one of the claims 1 to 7, characterized in that the collimating lens (19) is spherical.

10 9. Optical device according to any one of the claims 1 to 8, characterized in that a lens (20) is arranged between the zone of the space (14) wherein the object to be analyzed is to be exposed and the sensor (13).